AMENDMENT TO THE SPECIFICATION AND CLAIMS

Please amend the application as follows:

In the Specification:

(1.) At page 1, immediately after the title and before the first paragraph, insert:

CROSS REFERENCES TO RELATED APPLICATIONS

(2) At page 1, replace the section heading "**FIELD OF THE INVENTION**" with the following two headings:

BACKGROUND OF THE INVENTION

1. FIELD OF THE INVENTION

(3) At page 1, replace THE HEADING "**BACKGROUND AND SUMMARY OF THE INVENTION**" with:

2. DESCRIPTION OF THE RELATED ART

(4) At page 3, immediately before the last paragraph, which begins with "According to several ..." insert the following heading:

SUMMARY OF THE INVENTION

(5) At page 8, replace the first paragraph with the following:

Discussions regarding the lateral flow technique tests and immunochromatographic assays are found in the following U.S. Patents, each of which is now incorporated herein [be] by reference: 6, 607,922; 6,541,277; 6,027,943;5,354,692; [5,656,50;] 5,654,162; 5,591,645; 5,145,789; 5,591,645; 5,798,273; 5,622,871; 5,602,040; 5,714,389; 5,879,951; 4,632,901; and 5,958,790.

(6) At page 14, replace the second full paragraph, beginning at line 7, with the following:

Further, to facilitate visual analysis, the flow dynamics and capture zone responsiveness of each test membrane can be modified such that adjacent capture zones in the array [44a, 44b, 44c 44d] may be spatially staggered with respect to one another. See, for example, [Figure 2C] Figure 2B wherein the most sensitive capture zone 44a is closest to the liquid absorbing region 34 and each next zone in the ordered array is positioned farther from the liquid absorbing region 34 such that the zone 44d is farthest from the liquid absorbing region 34 and closest to the sample region 24. The staggered arrangement can facilitate visual interpretation of the display as it is determined which capture zone best correlates with the actual analyte concentration, i.e., the capture zone of highest threshold concentration range for which there is a visually detectable response. This configuration may be created in accord with the [principles] principles of capillary flow, as described herein with regard to the device 80 of Figure 6. The capture zone sensitivities are a function of the distance relationship between the sample region and each capture zone, allowing the capture zones in different membranes to form a staggered relationship. In such cases the relative sensitivities of the several test membranes may be further adjusted by changing the cross sectional area of the conjugate pads, varying membrane porosity, or modifying detector concentrations to achieve the desired result.

(7) At page 15, replace the second full paragraph, beginning at line 10, with:

The device 70 shown in Figure 5 is a more simplified system for determining analyte concentration. It comprises a sample region 24 and multiple test membranes [42] all formed on a substrate 72. [(not shown).] The substrate 72 may be a cellulose product. No conjugate pad and no absorbing medium are present. Alternately the device could include one or four conjugate pads configured as described for the embodiments of Figures 1 and 3.

(8) Replace the paragraph beginning at line 28 of page 15 and continuing on to page 16 with:

The overall length of each of the devices ~~10, 50, 60, 70 and 80~~ 10, 50, 60, 70 and 80 may range from approximately 10 cm up to about 20 cm or more. For the device 80 the length is measured from an edge of the sample region 24 to the end of the handle region 88. The widths of each of the devices ~~10, 50, 60, 70, 80 and 100~~ 10, 50, 60, 70 and 80 is primarily a function of the test membrane width. With [an exemplary] four test membranes 42, as shown in Figures 2, 3, 4, 5 and 7, the width of the device 80 may be on the order of four to five cm or more, but preferably is less than 3cm. The devices could have more or fewer assay regions than shown in the figures. The width of the device 80, having one test membrane, may be up to approximately 2cm but could be substantially smaller.